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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,064	08/07/2003	Leisha J. Rotering	H0003883/13358.18USU1	1001

7590 03/04/2005

Merchant & Gould P.C.
Honeywell International Inc.
Patent Services Group
101 Columbia Road
Morristown, NJ 07962

EXAMINER

BUSHEY, CHARLES S

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/636,064

Applicant(s)

ROTERING ET AL

Examiner

Scott Bushey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 14-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 35-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-7-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-13, and 35-47, as well as Species A, as depicted by Figure 8 in the reply filed on January 13, 2005 is acknowledged.
2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-4, 6-13, 35-39, and 41-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swan taken together with Monroe et al.

Swan (Fig. 1) substantially discloses applicant's invention as recited by instant claims 1-4, 6-13, 35-39, and 41-47, except for the filter means (27) being capable of removing particles of 1.0 micrometer size and smaller specifically by using a reverse osmosis filter. Swan also fails to teach controlling the inlet solenoid valve (20) by the use of first and second level detection floats, which detect both high and low levels of fluid within a container downstream of the filter means. Swan does teach controlling liquid flow to a heated reservoir via passage through a filter (27) by the controlled operation of an electrically activated solenoid valve (20).

Monroe et al (col. 5, lines 12-16, 60-67; col. 6, lines 1-5; col. 8, lines 34-37, 58-67; col. 9, lines 1-6; col. 10, lines 24-28, 42-55; col. 11, lines 33-45, 56-60; col. 12, lines 10-67; col. 13, lines 1-4, 56-67; col. 15, lines 23-27) disclose a water filtering and heating system similar to that of Swan, wherein the device utilizes multiple filters in series culminating in the use of a reverse osmosis filter, all upstream of a collection tank, which may feed the filtered water to a water heating means. Monroe et al also teach controlling water flow to the collection tank and thus through the upstream filter assembly by feedback control using upper and lower level water sensors within the collection tank. It would have been obvious to an artisan at the time of the invention, to modify the humidifier system as taught by Swan to include high purity filtration means, such as reverse osmosis filters, and also to control the flow of water through the apparatus with multiple level sensing floats, in view of Monroe et al, since such would reduce maintenance downtime due to mineral buildup on the downstream heaters and/or appliances, as

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well as optimizing the operation of the device by controlling water flow there through relative to the amount required to humidify the requisite area to the level necessary.

6. Claims 5 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 1-4, 6-13, 35-39, and 41-47 above, and further in view of Guetersloh et al.

The reference combination as applied to claims 1-4, 6-13, 35-39, and 41-47 above substantially discloses applicant's invention as recited by instant claims 5 and 40, except for the float means including a magnet and reed switch.

Guetersloh et al (col. 5, lines 38-50) teach a humidifier system similar to that as taught by the primary reference combination, wherein the water level sensing float member includes a magnet and reed switch, as is well known within the art. It would have been obvious to an artisan at the time of the invention, to modify the water level sensing float member of the primary reference combination, to include a magnet and reed switch in view of Guetersloh et al, since such would allow for much of the vital control circuit hardware to remain outside of the corrosive environment of the heated reservoir, thereby increasing the useful life of the device.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (571) 272-1153. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Bushey
Primary Examiner
Art Unit 1724

csb
3-2-05



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